INVESTIGATOR'S ANNUAL REPORT

National Park Service

All or some of the information provided may be available to the public

Reporting Year: 2002	**Park:** Shenandoah NP
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Permit#:
SHEN-2002-SCI-0004

Park-assigned Study Id. #:
SHEN-00190

Project Title:
Study of Geologic Resources and Surficial Mapping

Permit Start Date: Jan 01, 2002	**Permit Expiration Date** Dec 31, 2004
Study Start Date: Jan 01, 2002	**Study End Date** Dec 31, 2004

Study Status:
Completed

Activity Type:
Research

Subject/Discipline:
Geology / General

Objectives:
Study of surficial geology in and adjacent to Shenandoah National Park relating these studies to problems of slope stability and landscape evolution and developing anunderstanding of the Pleistocene and Holocene climate and landscape history of the Blue Ridge.

Findings and Status:
Continued sampling of sites for carbon-14 dating and pollen analysis concentrating in the Big Meadows and Kinsey Run areas to further refine models for climate change in the Blue Ridge between about 35,000 years before present through to the historic period. Preliminary findings indicate that boreal forest conditions prevailed i the Blue Ridge in central Virginia at 23 to 24 thousand years before present. Completed extensive study of block field fabrics in the area of Black Rock in the Payne Run drainage. Findings indicate that downslope transport of the boulders was facilitated by interstitial ice. Completed compilation of a 100,000-scale map including all of the Blue Ridge between Front Royal and Waynesboro, VA and all of Shenandoah National Park showing debris-flow fans, terraces, and alluvial fans, all of late Pleistocene and Holocene age. Map and text currently in review at U.S. Geological Survey before release.

For this study, were one or more specimens collected and removed from the park but not destroyed during analyses?
No

Funding provided this reporting year by NPS: 0	**Funding provided this reporting year by other sources:** 250000

Fill out the following ONLY IF the National Park Service supported this project in this reporting year by providing money to a university or

college	
Full name of college or university:	**Annual funding provided by NPS to university or college this reporting year:**
n/a	0